AMSAT News Service Weekly Bulletins
Issue: ANS-332
Date: 2010-11-28
Sources: amsat-ans-2010-ans-332-weekly.txt

AMSAT NEWS SERVICE
ANS-332

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

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SB SAT @ AMSAT $ANS-332.01
FASTRAC Tracking Assistance Requested

AMSAT News Service Bulletin 332.01
  From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.01

Sebastian Munoz, KE5FKV, FASTRAC Student Program Manager, reports that last Friday 19 November 2010 the FASTRAC satellites (Emma and Sara Lily) were launched from Kodiak, AK. At this point the FASTRAC Team has been able to determine that both of them are beaconing and that they are talking to each other from their own station and with the help of HAMs all over the world.

They have been able to decode both Sara Lily and Emma's beacons and some of their crosslink data exchanges. From these they have been able to determine that their primary sensor, a GPS receiver is working properly.

At this point Emma's beacon has reverted to its default configuration where the satellite beacons at 9k6 every two minutes while Sara Lily is continuing to beacon at 1k2 baud every three minutes. Also at this point Sara Lily's signal appears to be weaker than Emma so they are asking the HAM community to help track both of them.

To do so it is recommended that you first try to hear FASTRAC-2's (Emma's) beacon which is on 145.825 MHz and then switch to see if you can listen for FASTRAC-1's (Sara Lily's) beacon which is on 437.345. You might also be able to hear the girls talking to each other at 9600 baud. The type of beacons that you should get if you are able to decode

them, should look something like this:

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FAST1>BEACON/1: <UI>:
F11001611484723.998635824658.10 +3888795.01  -567497.09 -1500.24821
+1194.21584 -7135.59277+0330282372 056 033 032 032 048

FAST2>BEACON/2: <UI>:
FAST2 Safe Mode

Stations not set up to receive packets, can send an audio file for
attempted decoding.

Current TLE's as of 25 November:

FASTRAC
1 90025U 0        10327.90121560 -.00000191 +00000-0 -19331-4 0 00099
2 90025 071.9702 131.7903 0018126 299.0783 060.8722 14.76368636000560

A single TLE can be used to track both satellites as Emma and Sara Lily
are currently stacked together.

The FASTRAC website will be updated with the most current TLEs
http://fastrac.ae.utexas.edu/for_radio_operators/users/phpBB3/predictedor
bit
.php

If you track the satellites, please let the FASTRAC team know through
their website:
http://fastrac.ae.utexas.edu/for_radio_operators/users/phpBB3/index.php
or at fastracsats@gmail.com.

If your station has powerful transmitting capabilities on both 145.825
MHz
and 437.345 MHz and you are able to track the satellites, please let the

team know as you might be able to help them establish a command link
which
they are still in the process of doing.

[ANS thanks Sebastian, KE5FKV, for the above information]

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SB SAT @ AMSAT $ANS-332.02
Antarctic Satellite Operation Planned From M/V Kapitan Khlebnikov

AMSAT News Service Bulletin 332.02
  From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.02

Herb, AA2PI plans amateur satellite operation during his voyage
aboard the polar-class Russian ice breaker Kapitan Khlebnikov as
it sails a route circumnavigating Antarctica from the Falkland
Islands to Hobart, TZ.

The itinerary is:
Depart Falkland Islands on December 4, 2010
Arrive Hobart, TZ on Jan 3, 2011

[ANS thanks Herb, AA2PI and Bill K7MT for the above information]

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SB SAT @ AMSAT $ANS-332.03
AMSAT at the Tampa, FL Hamfest

AMSAT News Service Bulletin 332.03
  From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.03

AMSAT will have a booth at the Tampabay Hamfest coming up on 4 December in Palmetto, Florida. AMSAT will also be doing 90 minutes of presentations on satellites and ARISS during a forum on Saturday. Please come by

to pick up the latest AMSAT gear, learn about ARISSat-1, FOX, and other projects, make a donation, or join or renew your AMSAT membership.

Andrew Glasbrenner, KO4MA, AMSAT's VP of Operations reports that he will

also be trying something new. For each donation of $25 or more, or each membership or renewal, Drew will personally provide the parts and help assembling an antenna for operating the satellites. We will be building a version of the CJU antenna in the booth, which is a small but very effective antenna to use with an HT to copy the Mode J satellites.

Using the CJU and an HT, and the 2m radio in your car, the Mode J satellites are easy to use. Drew requests that people interested in building the antenna contact him ahead of time for details or to RSVP for this offer.

[ANS thanks Drew, KO4MA, for the above information]

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SB SAT @ AMSAT $ANS-332.04
AMSAT at the 2010 Superstition Hamfest, Mesa, AZ

AMSAT News Service Bulletin 332.04
  From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.04

The Superstition Amateur Radio Club will host its annual hamfest on the morning of Saturday, 4 December 2010. The hamfest is located in the southwest parking lot of Mesa Community College, along the east side of Dobson Road between Southern Avenue and the US-60 freeway in Mesa, Arizona. Additional information about the hamfest, including talk-in frequencies, is available at: http://wb7tjd.org/hamfest

AMSAT will have a table at this hamfest, and Patrick Stoddard, WD9EWK, will be on the air for demonstrations using various satellites. The hamfest is in grid DM43bj.

[ANS thanks Patrick, WD9EWK, for the above information]

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SB SAT @ AMSAT $ANS-332.05
Bill Ress, N6GHZ, appointed AMSAT Director of Launch Opportunities

AMSAT News Service Bulletin 332.05
From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
BID: $ANS-332.05

AMSAT President Barry Baines, WD4ASW has appointed Bill Ress, N6GHZ of Camino, CA as AMSAT's Director of Launch Opportunities, a new position. The appointment was announced at the AMSAT BOD meeting and AMSAT Annual Meeting that was held last month in Elk Grove Village, IL. In his capacity as Director of Launch Opportunities, Bill will serve as the central point for managing:

+ Fox Launch Opportunities
+ Ride Share Opportunities
+ AMSAT Presence at small satellite conferences

Supporting Bill's efforts will be a volunteer task force to help coordinate and compile launch information. Working with the VP-Engineering and AMSAT President, the Director will make recommendations to the AMSAT

BOD to develop launch objectives and serve as the central point for securing feasible launches for AMSAT spacecraft.

AMSAT President Barry Baines, WD4ASW noted Bill's qualifications for this position. "As a former BOD member who chaired the Engineering Task Force that developed the recommendation to the AMSAT Board of Directors to build a cubesat('Project Fox'), Bill understands AMSAT's strategic vision, our current capabilities and the current state of flight options.
His professional contacts and location on the West Coast places him in an excellent position to identify and nurture potential launches, a significant task that requires an appreciation of both AMSAT and the state of the launch industry."

Bill and his team will be working to establish dialog with both satellite
customers who may have ride share potential a well as satellite builders

to evaluate potential ride share potential. The team will also evaluate

and determine how best for AMSAT to respond to NASA Launch Initiatives, other launch provider announcements, and potential university relationships for securing launches as these opportunities arise.

Individuals who become aware of potential launch opportunities which might be of interest to AMSAT are encouraged to contact Bill at his e-mai (n6ghz at amsat.org).

[ANS thanks Barry, WD4ASW, for the above information]

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SB SAT @ AMSAT $ANS-332.06
ESA to Sponsor Student Participation in IAA Conference in Rome

AMSAT News Service Bulletin 332.06
From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
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The 1st International Academy of Astronautics (IAA) Conference on

University Satellites Missions and Cubesat Conference which will
be held in Rome, Italy on January 24-29, 2011. Submissions are due
by December 18, 2010. Early registration begins on January 10, 2011.

The Gruppo di Astrodinamica Universit[illegible] degli Studi Sapienza is
pleased to announce that ESA has kindly offered ten scholarships for
students who will present a paper at the 1st IAA Conference on Uni-
versity Satellites Missions and Cubesat Conference next January. You
can find the information at the following link:
http://tinyurl.com/25wouy5

Arrangements have been made for student housing at the Conference:
http://tinyurl.com/26jybsx

The Gruppo di Astrodinamica and the IAA hopes that this will encourage
students to participate in the Conference.

[ANS thanks the Gruppo di Astrodinamica Universit[illegible] degli Studi
Sapienza
  the IAA for the above information]

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SB SAT @ AMSAT $ANS-332.07
Satellite Shorts From All Over

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+ Art, W4ART has published a link to the photos he took at the
  2010 AMSAT Space Symposium and Annual General Meeting:

http://www.afeller.us/Studio_dArt/Personal_Galleries/Pages/AMSAT_2010.htm
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  Additional photos and captions will be published in the AMSAT
  Journal.

+ Project Engineer for ARISS, Kenneth, N5VHO wrote, "For all you
  that wonder what it is like for the astronauts to work ground
  stations during a general pass. Col. Wheelock gives you a personal
  video tour of the ISS ham radio station while he answers calls
  from operators on the ground." Watch at:
  http://www.youtube.com/watch?v[illegible]3EYcyszf8

+ Membership of the FUNcube satellite and Software Defined Radio
  (SDR) Dongle Yahoo Group has now reached the 100 mark. You can
  join the FUNcube Yahoo Group at:
  http://groups.yahoo.com/group/FUNcube/

+ A photo gallery of the Minotaur launch from Alaska that launched
  a payload of seven satellites can be viewed at:
  http://spaceflightnow.com/minotaur/stps26/101120gallery/

+ Captain Yuri Bodrov, Master of the M/V "MOTTLER", says he will be
  operating as UT1FG/MM on AO-7, AO-27, AO-51, HO-68, SO-50, SO-67,
  amd VO-52 from the wet squares in the ocean on his next voyage
  around South America from Brasil/Paranagua to Argentina/San-Lorenzo,
  through the Strait of Magellan, Chile/San-Antonio/Punta Potache, and
  the Panama Cannal.

+ Martin, KC9JGE, has made a YouTube video of one of his contacts with
  Astronaut Doug Wheelock KF5BOC on the International Space Station.
  You can watch the video via the SouthGate ARC site at:
  http://tinyurl.com/25qtdrt

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-332.08
ARISS Status - 22 November 2010

AMSAT News Service Bulletin 332.08
  From AMSAT HQ SILVER SPRING, MD.
November 28, 2010
To All RADIO AMATEURS
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1. Euro Space Center Contact Successful

Twenty-four students from the International School Zurich North, Switzerland, attending the Euro Space Center in Transinne, Belgium, spoke with ISS astronaut Doug Wheelock, KF5BOC via an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, November 16. Telebridge station VK5ZAI in Australia handled the radio link. Wheelock fielded 15 questions about life in space during the session. The contact was an activity incorporated into the Euro Space Center Space Camp which hosts students from all over Europe and abroad.

2. Grand Junction Students Speak with ISS Astronaut

On Friday, November 19, students attending Holy Family Catholic School in Grand Junction, Colorado participated in an Amateur Radio on the International Space Station (ARISS) contact with on-orbit astronaut Doug Wheelock, KF5BOC. The school involved the entire student body of 400 students in this project. Several of the older students earned their amateur radio licenses prior to the contact and younger students participated in essay contests and art activities devoted to the contact with the ISS.

3. ARISS International Team Meeting Held

The monthly ARISS International Team teleconference was held on Tuesday, November 16. Topics discussed included updates on ARISSat-1 and the Columbus module radio equipment. Minutes have been posted. See: https://www.rac.ca/ariss/arisstel2010-11-16.htm

4. ARISSat-1 Approved for Shipping

ARISSat-1 has been approved by Energia for shipment to Russia. The satellite is currently scheduled to arrive in Russia the first week of December. After the battery and the Kursk University experiment are installed, the satellite will be tested for flight and a final safety review will be scheduled.

[ANS thanks Carol, KB3LKI, for the above information]

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In addition to regular membership, AMSAT offers membership in the President's

Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS